

#4

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/343,406

DATE: 08/01/2000
 TIME: 11:11:15

Input Set : A:\343406.txt
 Output Set: N:\CRF3\08012000\I343406.raw

ENTERED

SEQUENCE LISTING

(1) GENERAL INFORMATION:

- (i) APPLICANT: ENDL, Josef
 - STAHL, Peter
 - ALBERT, Winfried
 - JUNG, Guenther-Gerhard
 - SCHENDEL, Dolores J.
 - MEINL, Edgar
 - DORNMAIR, Klaus
- (ii) TITLE OF INVENTION: ANTIGEN-SPECIFIC, ACTIVATED T LYMPHOCYTES, DETECTION AND USE
- (iii) NUMBER OF SEQUENCES: 39
- (iv) CORRESPONDENCE ADDRESS:
 - (A) ADDRESSEE: Nikaido, Marmelstein, Murray & Oram LLP
 - (B) STREET: 655 Fifteenth Street N.W. Suite 330
 - (C) CITY: Washington
 - (D) STATE: D.C.
 - (E) COUNTRY: U.S.A.
 - (F) ZIP: 20005-5701
- (v) COMPUTER READABLE FORM:
 - (A) MEDIUM TYPE: Floppy disk
 - (B) COMPUTER: IBM PC compatible
 - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
 - (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
- (vi) CURRENT APPLICATION DATA:
 - (A) APPLICATION NUMBER: US/09/343,406
 - (B) FILING DATE: 30-Jun-1999
 - (C) CLASSIFICATION:
- (vii) PRIOR APPLICATION DATA:
 - (A) APPLICATION NUMBER: 08/967,242
 - (B) FILING DATE: 05-NOV-1997
 - (A) APPLICATION NUMBER: US 08/374,468
 - (B) FILING DATE: 18-JAN-1995
 - (A) APPLICATION NUMBER: DE P 44 01 629.8
 - (B) FILING DATE: 20-JAN-1994
 - (A) APPLICATION NUMBER: DE P 44 03 522.5
 - (B) FILING DATE: 04-FEB-1994
 - (A) APPLICATION NUMBER: DE P 44 18 091.8
 - (B) FILING DATE: 24-MAY-1994
- (viii) ATTORNEY/AGENT INFORMATION:
 - (A) NAME: Murray, Robert B.
 - (B) REGISTRATION NUMBER: 22,980
 - (C) REFERENCE/DOCKET NUMBER: P564-U5002
- (ix) TELECOMMUNICATION INFORMATION:
 - (A) TELEPHONE: (202)638-5000
 - (B) TELEFAX: (202)638-4810

(2) INFORMATION FOR SEQ ID NO: 1:

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68      (i) SEQUENCE CHARACTERISTICS:
69          (A) LENGTH: 8 amino acids
70          (B) TYPE: amino acid
71          (C) STRANDEDNESS:
72          (D) TOPOLOGY: linear
74      (ii) MOLECULE TYPE: peptide
77      (ix) FEATURE:
78          (A) NAME/KEY: Peptide
79          (B) LOCATION: 1
80          (D) OTHER INFORMATION: /note= "Xaa in position 1 is an
81 optional sequence selected from 1 to 10 amino acids."
83      (ix) FEATURE:
84          (A) NAME/KEY: Peptide
85          (B) LOCATION: 6
86          (D) OTHER INFORMATION: /note= "Xaa in position 6 is Thr or Glu."
88      (ix) FEATURE:
89          (A) NAME/KEY: Peptide
90          (B) LOCATION: 8
91          (D) OTHER INFORMATION: /note= "Xaa in position 8 is
92 an optional sequence selected from 1 to 8 amino acids."
95      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
W--> 97      Xaa Pro Glu Val Lys Xaa Lys Xaa
98      1           5
100 (2) INFORMATION FOR SEQ ID NO: 2:
102      (i) SEQUENCE CHARACTERISTICS:
103          (A) LENGTH: 25 amino acids
104          (B) TYPE: amino acid
105          (C) STRANDEDNESS:
106          (D) TOPOLOGY: linear
108      (ii) MOLECULE TYPE: peptide
112      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
114      Gly Met Ala Ala Leu Pro Arg Leu Ile Ala Phe Thr Ser Glu His Ser
115      1           5           10           15
117      His Phe Ser Leu Lys Lys Gly Ala Ala
118      20           25
120 (2) INFORMATION FOR SEQ ID NO: 3:
122      (i) SEQUENCE CHARACTERISTICS:
123          (A) LENGTH: 20 amino acids
124          (B) TYPE: amino acid
125          (C) STRANDEDNESS:
126          (D) TOPOLOGY: linear
128      (ii) MOLECULE TYPE: peptide
131      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
133      Glu Arg Gly Lys Met Ile Pro Ser Asp Leu Glu Arg Arg Ile Leu Glu
134      1           5           10           15
136      Ala Lys Gln Lys
137      20
139 (2) INFORMATION FOR SEQ ID NO: 4:
141      (i) SEQUENCE CHARACTERISTICS:
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142 (A) LENGTH: 14 amino acids
143 (B) TYPE: amino acid
144 (C) STRANDEDNESS:
145 (D) TOPOLOGY: linear
147 (iii) MOLECULE TYPE: peptide
150 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
152 Leu Pro Arg Leu Ile Ala Phe Thr Ser Glu His Ser His Phe
153 1 5 10
155 (2) INFORMATION FOR SEQ ID NO: 5:
157 (i) SEQUENCE CHARACTERISTICS:
158 (A) LENGTH: 20 amino acids
159 (B) TYPE: amino acid
160 (C) STRANDEDNESS:
161 (D) TOPOLOGY: linear
163 (iii) MOLECULE TYPE: peptide
167 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
169 Gly Met Ala Ala Leu Pro Arg Leu Ile Ala Phe Thr Ser Glu His Ser
170 1 5 10 15
172 His Phe Ser Leu
173 20
175 (2) INFORMATION FOR SEQ ID NO: 6:
177 (i) SEQUENCE CHARACTERISTICS:
178 (A) LENGTH: 20 amino acids
179 (B) TYPE: amino acid
180 (C) STRANDEDNESS:
181 (D) TOPOLOGY: linear
183 (iii) MOLECULE TYPE: peptide
187 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
189 Ala Leu Pro Arg Leu Ile Ala Phe Thr Ser Glu His Ser His Phe Ser
190 1 5 10 15
192 Leu Lys Lys Gly
193 20
195 (2) INFORMATION FOR SEQ ID NO: 7:
197 (i) SEQUENCE CHARACTERISTICS:
198 (A) LENGTH: 20 amino acids
199 (B) TYPE: amino acid
200 (C) STRANDEDNESS:
201 (D) TOPOLOGY: linear
203 (iii) MOLECULE TYPE: peptide
205 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
207 Arg Leu Ile Ala Phe Thr Ser Glu His Ser His Phe Ser Leu Lys Lys
208 1 5 10 15
210 Gly Ala Ala Ala
211 20
213 (2) INFORMATION FOR SEQ ID NO: 8:
215 (i) SEQUENCE CHARACTERISTICS:
216 (A) LENGTH: 20 amino acids
217 (B) TYPE: amino acid
218 (C) STRANDEDNESS:

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219 (D) TOPOLOGY: linear
221 (iii) MOLECULE TYPE: peptide
225 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
227 Pro Glu Val Lys Glu Gly Met Ala Ala Leu Pro Arg Leu Ile Ala
228 1 5 10 15
230 Phe Thr Ser Glu
231 20
233 (2) INFORMATION FOR SEQ ID NO: 9:
235 (i) SEQUENCE CHARACTERISTICS:
236 (A) LENGTH: 18 amino acids
237 (B) TYPE: amino acid
238 (C) STRANDEDNESS:
239 (D) TOPOLOGY: linear
241 (iii) MOLECULE TYPE: peptide
245 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
247 Ala Ala Leu Pro Arg Leu Ile Ala Phe Thr Ser Glu His Ser His Phe
248 1 5 10 15
250 Ser Leu
253 (2) INFORMATION FOR SEQ ID NO: 10:
255 (i) SEQUENCE CHARACTERISTICS:
256 (A) LENGTH: 16 amino acids
257 (B) TYPE: amino acid
258 (C) STRANDEDNESS:
259 (D) TOPOLOGY: linear
261 (iii) MOLECULE TYPE: peptide
265 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
267 Ala Ala Leu Pro Arg Leu Ile Ala Phe Thr Ser Glu His Ser His Phe
268 1 5 10 15
271 (2) INFORMATION FOR SEQ ID NO: 11:
273 (i) SEQUENCE CHARACTERISTICS:
274 (A) LENGTH: 14 amino acids
275 (B) TYPE: amino acid
276 (C) STRANDEDNESS:
277 (D) TOPOLOGY: linear
279 (iii) MOLECULE TYPE: peptide
282 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
284 Ala Ala Leu Pro Arg Leu Ile Ala Phe Thr Ser Glu His Ser
285 1 5 10
287 (2) INFORMATION FOR SEQ ID NO: 12:
289 (i) SEQUENCE CHARACTERISTICS:
290 (A) LENGTH: 12 amino acids
291 (B) TYPE: amino acid
292 (C) STRANDEDNESS:
293 (D) TOPOLOGY: linear
295 (iii) MOLECULE TYPE: peptide
299 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:
301 Ala Ala Leu Pro Arg Leu Ile Ala Phe Thr Ser Glu
302 1 5 10
304 (2) INFORMATION FOR SEQ ID NO: 13:

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Input Set : A:\343406.txt
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306 (i) SEQUENCE CHARACTERISTICS:
307 (A) LENGTH: 14 amino acids
308 (B) TYPE: amino acid
309 (C) STRANDEDNESS:
310 (D) TOPOLOGY: linear
312 (ii) MOLECULE TYPE: peptide
316 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:
318 Gly Met Ala Ala Leu Pro Arg Leu Ile Ala Phe Thr Ser Glu
319 1 5 10
321 (2) INFORMATION FOR SEQ ID NO: 14:
323 (i) SEQUENCE CHARACTERISTICS:
324 (A) LENGTH: 12 amino acids
325 (B) TYPE: amino acid
326 (C) STRANDEDNESS:
327 (D) TOPOLOGY: linear
329 (ii) MOLECULE TYPE: peptide
333 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:
335 Gly Met Ala Ala Leu Pro Arg Leu Ile Ala Phe Thr
336 1 5 10
338 (2) INFORMATION FOR SEQ ID NO: 15:
340 (i) SEQUENCE CHARACTERISTICS:
341 (A) LENGTH: 18 amino acids
342 (B) TYPE: amino acid
343 (C) STRANDEDNESS:
344 (D) TOPOLOGY: linear
346 (ii) MOLECULE TYPE: peptide
349 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:
351 Leu Pro Arg Leu Ile Ala Phe Thr Ser Glu His Ser His Phe Ser Leu
352 1 5 10 15
354 Lys Lys
357 (2) INFORMATION FOR SEQ ID NO: 16:
359 (i) SEQUENCE CHARACTERISTICS:
360 (A) LENGTH: 14 amino acids
361 (B) TYPE: amino acid
362 (C) STRANDEDNESS:
363 (D) TOPOLOGY: linear
365 (ii) MOLECULE TYPE: peptide
369 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 16:
371 Arg Leu Ile Ala Phe Thr Ser Glu His Ser His Phe Ser Leu
372 1 5 10
374 (2) INFORMATION FOR SEQ ID NO: 17:
376 (i) SEQUENCE CHARACTERISTICS:
377 (A) LENGTH: 14 amino acids
378 (B) TYPE: amino acid
379 (C) STRANDEDNESS:
380 (D) TOPOLOGY: linear
382 (ii) MOLECULE TYPE: peptide
386 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 17:
388 Leu Pro Arg Leu Ile Ala Phe Thr Ser Glu His Ser His Phe

VERIFICATION SUMMARY DATE: 08/01/2000
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Input Set : A:\343406.txt
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L:34 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:35 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:97 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1